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EXAMINER

PARDO, THUY N

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/661,748	Applicant(s) TONG ET AL.	
	Examiner Thuy N. Pardo	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-11,13-16,18-26,53-57 and 59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,5,8-10,13,14,18-21 and 59 is/are allowed.
- 6) ☒ Claim(s) 1, 6, 7, 11, 15, 16, 22-26 and 53-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's Amendment filed on March 10, 2008 in response to Examiner's Office Action has been reviewed. Claims 1, 3, 5-11, 13-16, 18-26, 53-57 and 59 are pending in the application. Claims 1, 3, 5, 13, 18, 53 and 59 are independent claims. Claims 2, 4, 12, 17, 27-52 and 58 are canceled, claims 3, 5, 13, 18 are amended, and claim 59 is added. This Office Action is made Final.

Allowable Subject Matter

2. Claims 3, 5, 8-10, 13, 14, 18-21 and 59 are allowed over the prior art of record.

The prior art of record fails to teach or suggest individually or in combination the total selection score comprises a total number of users that selected a result returned for a search for the search query as set forth in independent claim 3, the instance score for the first query comprises a number of instances the first article was shown in a search result for the first query as set forth in independent claims 5 and 13, determining the number of times the first article was selected when presented in search results for the first query comprises determining a number of clickthroughs for the first article when presented in search results for the first search query as set forth in independent claim 18, and employing the stored indication of the relationship between the first search query and the second search query to access the stored user data and ranking results within the plurality of search results based at least in part on the accessed user data as set forth in independent claim 59.

Dependent claims 8, 9, 10, 14, 19-21 being further limiting to the independent claims 3, 5 and 13 respectively, definite and enable by the Specification are also allowed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6, 7, 11, 15, 16, 22-26 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corston-Oliver et al. (Hereinafter “Corston-Oliver”) US Patent No. 6,901,402 in view of Yayoi et al. (hereinafter “Yayoi”) US Patent application Publication No. 2003/0149704 A1.

As to claim 1, Corston-Oliver teaches the invention substantially as claimed, comprising:
receiving a first search query [first textual input, ab; fig. 3A; col. 7, lines 64-67];
receiving a second search query [second textual input, ab; fig. 3A, col. 8, lines 21-22];
identifying a relationship between the first search query and the second search query based at least in part on a criterion [determining a relationship between first and second textual inputs based at least in part on a criterion (i.e., predetermined grammatical rules), ab; fig. 3A; col. 8, lines 7 to col. 9, lines 14].

However, Corston-Oliver does not explicitly teach determining a first article associated with the second search query, determining a first ranking score for the first article based at least in part on data associated with the first search query and outputting a search result comprising

Art Unit: 2168

the first article although it has the same functionality of determining whether any matches exist between the content word in the second textual input and the words remaining in the document of the first textual input [col. 12, lines 24-42].

Yayoi teaches determining a first article associated with the second search query [retrieving information using a second search query, see the abstract]; determining a first ranking score for the first article [ranking retrieved documents, fig. 2] based at least in part on data associated with the first search query [second search query has the first element of the first query, see the abstract; 901 and 901a of fig. 10], and outputting a search result comprising the first article [output 006 having D1, D2 and D3 of fig. 10].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add the feature of Corston-Oliver to the system of Yayoi as an essential means to optimize search operation of finding objects containing the data of interest to users.

As to claim 6, Corston-Oliver and Yayoi teach the invention substantially as claimed. Yayoi further teaches that the data associated with the first search query comprises a selection score for the first article [ranking D1, D2 and D3 for the first query, 902 of fig.].

As to claim 7, Corston-Oliver and Yayoi teach the invention substantially as claimed. Yayoi further teaches that the selection score for the first article comprises selections made in search results for the first search query in a context of the search query [ab; 901-1006 of fig. 10].

As to claim 11, Corston-Oliver and Yayoi teach the invention substantially as claimed. Yayoi further teaches that the first search query data associated with the first search query comprises a second selection score for a second article associated with the first search query [ab; 902, 1002 of fig. 10].

As to claim 15, Corston-Oliver and Yayoi teach the invention substantially as claimed. Yayoi further teaches that the first article comprises a representation of the first article [ab; 902 of fig. 10].

As to claim 16, Corston-Oliver and Yayoi teach the invention substantially as claimed. Corston-Oliver further teaches the representation of the first article comprises a uniform resource locator [col. 14, lines 55 to col. 15, lines 8].

As to claim 19, Corston-Oliver and Yayoi teach the invention substantially as claimed. Yayoi further teaches that determining the first ranking score for the first article comprises: determining a first initial ranking score for the first article when associated with the search query and calculating a mathematical function comprising the first initial ranking score and the first selection score [1002, 1006 of fig. 10, ab].

As to claim 22, Corston-Oliver and Yayoi teach the invention substantially as claimed. Corston-Oliver further teaches that determining a second article associated with the second

Art Unit: 2168

search query; and (f) determining a second ranking score for the second article based at least in part on data associated with the first related query [col. 8, lines 16-24].

As to claim 23, Corston-Oliver and Yayoi teach the invention substantially as claimed. Yayoi further teaches ranking the first article and the second article based at least in part on the first ranking score and the second ranking score [1002, 1006 of fig. 10].

As to claim 24, Corston-Oliver and Yayoi teach the invention substantially as claimed. Yayoi further teaches providing a search result for the search query having the first article and the second article ranked according at least in part to the first ranking score and the second ranking score [fig. 10; ab].

As to claim 25, Corston-Oliver and Yayoi teach the invention substantially as claimed. Corston-Oliver further teaches determining a second search query related to the search query, and wherein determining the first ranking score for the first article is further based at least in part on data associated with the second search query [ab; fig. 3A].

As to claim 26, Corston-Oliver and Yayoi teach the invention substantially as claimed. Yayoi further teaches that determining the first search query further comprises determining a query previously made consecutively with the search query [fig. 10; ab].

As to claim 57, Corston-Oliver and Yayoi teach the invention substantially as claimed. Yayoi further teaches that criterion is at least one of an order of submission, a time period, a misspelling relationship, a synonym relationship, and antonym relationship, or an acronym relationship [0032-0033].

4. Claims 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corston-Oliver et al. (Hereinafter "Corston-Oliver") US Patent No. 6,901,402 in view of Yayoi et al. (hereinafter "Yayoi") US Patent application Publication No. 2003/0149704 A1, in further view of Prince US patent No. 6,877,002.

As to claim 53, Corston-Oliver and Yayoi teach the invention substantially as claimed as specified in claim 1 and 27 above. However, neither Corston-Oliver nor Yayoi teaches the feature of determining at least one quality signal for a first article from the plurality of articles, wherein the quality signal is associated at least in part with the first search query although it has the same functionality of submitting queries to search engines to find information of interest to the user. Prince teaches determining at least one quality signal for a first article from the plurality of articles, wherein the quality signal is associated at least in part with the first search query [data signal having a qualify keywords code segment for qualifying metadata if the score is equal to or greater than a predetermined threshold, col. 18, lines 14-18] and calculating a first ranking score for the first article based at least in part on the quality signal [col. 18, lines 14-18, 50-55; ab]. Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the

time of the invention to add the feature of Prince to the Yadav-Yayoi's system as an essential means to optimize search operation of finding objects containing the data of interest to users.

As to claim 54, Corston-Oliver, Yayoi and Prince teach the invention substantially as claimed. Yayoi further teaches ranking the first article against at least some of the plurality of articles based at least in part on the first ranking score [ranking of retrieved results, fig. 9].

As to claim 55, Corston-Oliver, Yayoi and Prince teach the invention substantially as claimed. Prince further teaches that the quality signal comprises clickthrough data [inherent in the system since quality signal is URI].

As to claim 56, Corston-Oliver, Yayoi and Prince teach the invention substantially as claimed. Yayoi further teaches that the first ranking score for the first article is calculated based at least in part on the relationship of the first search query and the second search query [0031-0036].

Response to Arguments

5. Applicant's arguments filed March 10, 2008 have been fully considered but they are not persuasive.

Applicant argues that the cited references do not teach two different queries that are determined to be related.

Examiner respectfully disagrees. Corston-Oliver teaches two different queries [first textual input and second textual input, see fig. 3A; 110, 122 of fig. 4] and determining the relationship between the two textual inputs [see fig. 3A; determining a relationship between first and second textual inputs based at least in part on a criterion (i.e., predetermined grammatical rules), ab; fig. 3A; col. 8, lines 7 to col. 9, lines 14].

Yayoi also teaches this feature of determining a first article associated with the second search query [retrieving information using a second search query, see the abstract]; determining a first ranking score for the first article [ranking retrieved documents, fig. 2] based at least in part on data associated with the first search query [second search query has the first element of the first query, see the abstract; 901 and 901a of fig. 10], and outputting a search result comprising the first article [output 006 having D1, D2 and D3 of fig. 10].

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2168

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy N. Pardo whose telephone number is 571-272-4082. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thuy N. Pardo/
Primary Examiner, Art Unit 2168